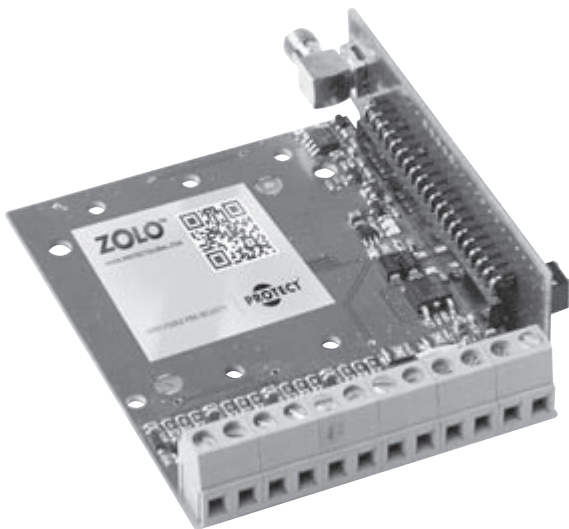


# ZOLO™

## Installation Manual



*Version 1.0*

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UNBEATABLE FOG SECURITY



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## 1.0. Introduction to ZOLO GSM Security System

**Thank you for choosing ZOLO GSM Security System. Hereafter called ZOLO or “the system”.**

ZOLO is a stand-alone security system designed for fog cannon. Easy to install, easy to use and easy to frighten off the burglars. By connecting ZOLO to a PROTECT fog cannon you can have your own unique and very effective alarm system - an integrated system, capable of being controlled with a remote control unit, and up to 10 phone numbers (SMS text messages and phone calls). The system can be installed anywhere: Residential homes, company offices, holiday cottages, caravans, boats, industrial containers and work huts etc.

ZOLO uses an internal SIM card (not included), an infra-red sensor, a communication card inside the fog cannon - and communicates with your phone so you can:

- Protect your property while you are away from home
- In case of burglary the fog cannon will activate and frighten off the burglars
- Include up to 10 users to receive system status messages and/or security alerts
- Switch the system on or off from anywhere in the world at no cost
- Receive SMS text messages updating you on the system status

### 1.1. Warranty note

ZOLO carries a 12-month warranty from PROTECT A/S. The warranty begins on the day of manufacture.

The warranty remains valid only if the system is used as intended, following all guidelines outlined in this manual and in accordance with the operating conditions specified. The warranty is void if the system has been exposed to mechanical impact, chemicals, high humidity, fluids, corrosive and hazardous environments or force majeure factors.

### 1.2. Safety instructions

- Do not use ZOLO where it can interfere with other devices - such as medical devices
- The system operates in the GSM850, 900, 1800 and 1900 bands
- Do not expose the system to high humidity, chemical environments or mechanical impact
- Do not attempt to repair the system yourself - any repairs must be carried out by fully qualified personnel only
- The system is only for indoor use
- Only the enclosed power supply should be connected to the system. The main circuit should be protected by short circuit or over-current protection
- Disconnect the mains power before installing
- To switch the system off, unplug the external electric power supply and disconnect the battery by first removing the front cover of the ZOLO device
- Only use the approved back-up battery type with the system to avoid fire or explosion.  
Take care when connecting positive and negative battery terminals



### 1.3. Limited liability

The buyer agrees that the system will reduce the risk of theft but that it does not guarantee against the occurrence of such events.

PROTECT A/S will not take any responsibility for the loss of personal effects, property or revenue whilst using the system.

The liability of PROTECT A/S is limited to the value of the system purchased.

PROTECT A/S is not affiliated with any mobile/wireless/cellular provider and is therefore not responsible for the quality of such services.

### 1.4. Read the installation manuals and watch the video

Please read this installation manual and the user manual before operating the system. You will also find a quick guide in the ZOLO box. By scanning this QR code with a smartphone you can watch the short installation video about ZOLO. The video is also available on [www.protectglobal.com/zolo](http://www.protectglobal.com/zolo).



### 1.5. Important recommendations for the SIM Card

You will need to supply your own SIM card. We advise you to choose the same GSM SIM provider for your ZOLO GSM Security System the one you use for your mobile phone. This will ensure the fastest, most reliable SMS/text message delivery service and phone call connection.

For maximum system reliability we recommend that you do not use a Pay As You Go SIM card. Because, in the event of insufficient credit balance on the SIM card, the system would fail to make a phone call or send SMS text messages.

Notice! The PIN Code on the SIM Card must be disabled.

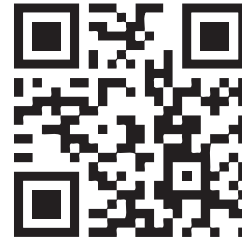
### 1.6. Technical support

ZOLO will ensure reliable protection and PROTECT A/S are confident that the user will be completely satisfied. In the unlikely event that you experience a problem, please contact the dealer/distributor from whom you made the purchase.

## 2.0. Preparing and mounting the PROTECT Fog Cannon

By scanning this QR code with a smartphone you can watch the short installation video about ZOLO. The video is also available on [www.protectglobal.com/zolo](http://www.protectglobal.com/zolo).

1

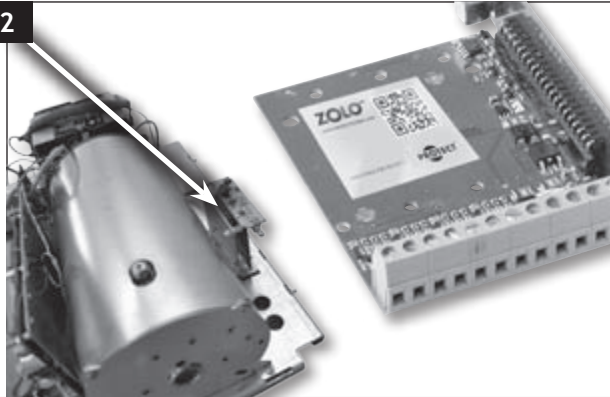


**Insert and connect the ZOLO Communication Card into the fog cannon.**

The enclosed PCB attached to a wire (ZOLO Communication Card) is placed on the rear metal plate of the fog cannon (it is magnetic) and is wired to the PCB of the fog cannon\*. Turn PCB-side away from the heating element. See diagrams for correct connection on page 5 and 6.

*\*Models PROTECT FOQUS, 600i, 1100i and 2200i. PROTECT QUMULUS: See special quick guide following the product.*

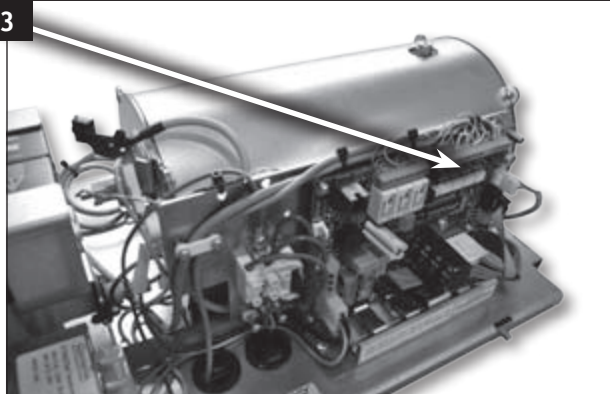
2



**Connect the verifying PIR sensor to the PCB and the fog cannon.**

Take the wire of the enclosed PIR sensor/verifying sensor, through the hole in the rear metal plate of the fog cannon - and connect the wire to the PCB of the fog cannon. See diagrams for correct connection on page 5 and 6.

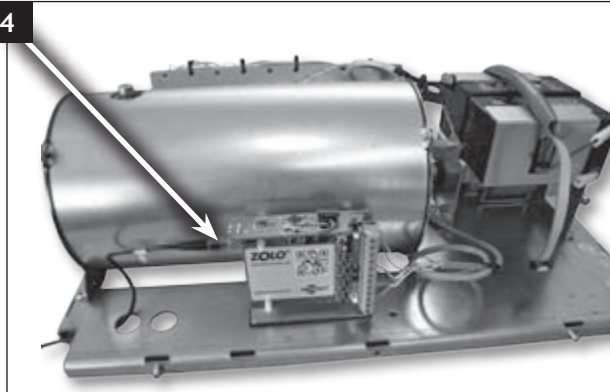
3



**Connect the antenna to the ZOLO Communication Card.**

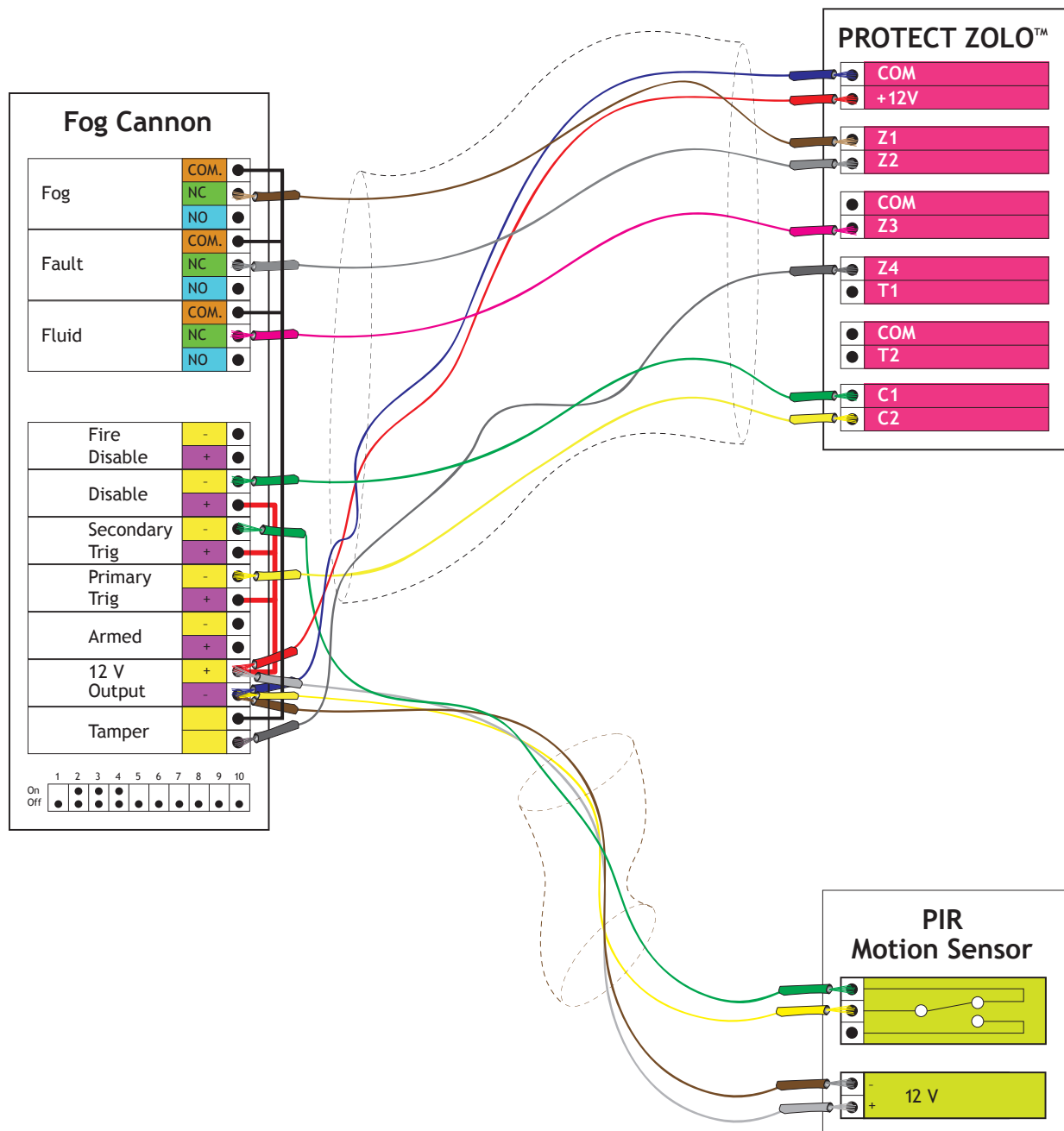
Take the wire of the enclosed antenna through the hole in the rear metal plate of the fog cannon - and connect it to the ZOLO Communication Card.

4



[illegible]

## Installation diagram - Visual



**Mount the fog cannon. Important!**

To mount the fog cannon follow the installation manual supplied with the product.

Important! To avoid release of the fog during installation, the fluid container and metal cabinet/cover should be inserted into place just before carrying out the full scale test, as per the instructions in the Fog Cannon manual.

**5****Mount the verifying PIR sensor.**

Mount the verifying PIR sensor with a suitable distance adjacent to the fog cannon.

Ensure that the fog cannon does not cover the detection angel of the sensor.

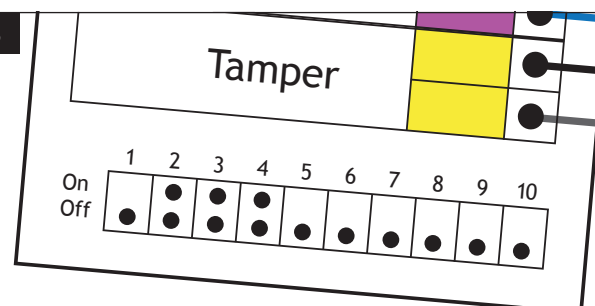
**6****Mount the antenna.**

The antenna is placed onto the top of the fog cannon (it is magnetic).

**7**

Set dipswitches 5-6-7 according to installation diagrams page 5 and 6.

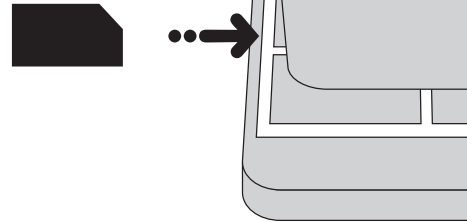
Set dipswitch 2-3-4 according to the fog cannon manual.

**8**

### 3.0. Preparing and mounting ZOLO

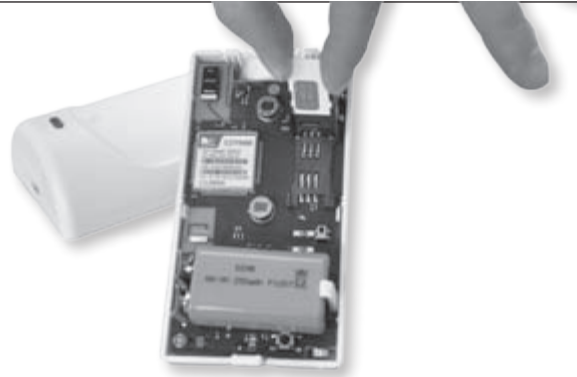
#### 9 Prepare the SIM Card.

If locked, insert the SIM Card (not included) into a mobile phone and then disable the SIM code on the SIM Card. Follow the instructions from your mobile phone. Notice! The SIM Card must support 2G.



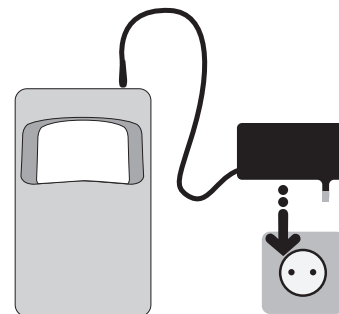
#### 10 Insert the SIM Card and the backup battery into the ZOLO GSM Security System device.

Insert the unlocked SIM Card (not included). Remember to open/lock the SIM Card holder when inserting/releasing the SIM Card. Check that the backup battery is placed correctly.



#### 11 Connect the ZOLO device to the power supply.

Plug the enclosed power supply connector into the device and insert the plug into the mains socket.



#### 12 Download the configuration tool software from [www.protectglobal.com/zolo](http://www.protectglobal.com/zolo) on a computer.

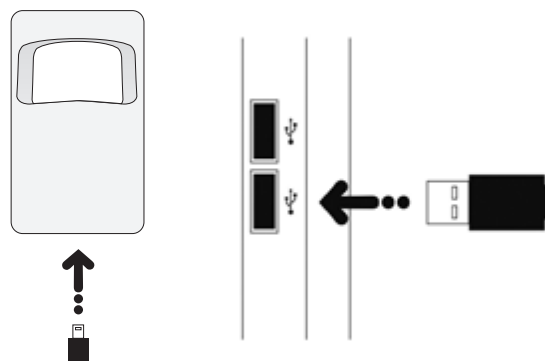
Follow the instructions from your computer and accept to run the software. Now choose the destination on the computer and follow the instructions of the ZOLO Configuration Tool. Finally click on "Install" and "Finish".





**Connect ZOLO to your PC via the USB cable.**

Use the enclosed USB cable to connect ZOLO to the computer containing the ZOLO Configuration Tool.

**13**

Run the software anytime you want by double left-clicking on the ZOLO Configuration Tool shortcut or icon located on the computer.

**14**

Once the software is up and running, left-click on the USB connection (connect-button) in the configuration software.

**15**

Type-in a 4-digit administrator password which is 1470 (by default) and click on the "Continue" button.

**16**

On successful first-time connection, a Quick Start Guide window will show up. Left-click on the Start Guide-button and follow the step-by-step instructions to program ZOLO. After completing all of the Quick Start Guide steps, your system is ready for use.

17



#### How to bind the fog cannon to ZOLO.

Still ZOLO must be powered up and connected to the computer via the USB cable. Also the fog cannon must be connected to power.

Now run the ZOLO Configuration Tool software and click on the USB connection/connect-button.

18



#### Open "Wireless Device Management" section.

This section uses radar to show wireless devices (like e.g. a fog cannon) visible to ZOLO within its wireless range. Unbound devices are indicated by a device icon with a red stripe above the icon. Once the device is bound, the stripe turns to green. The wireless devices are automatically arranged within the radar diagram according to the strength of their wireless signal, expressed in percentage terms. When clicking on a wireless device in the radar diagram the ID number of the device turns up next to the Add-button. Now click "Add".

19



#### How to remove a wireless device from the system.

Read no. 18 and 19 on this page. The only difference is that the button changes to "Remove". Click to remove the wireless device.

After the successful removal process, the stripe above the wireless device icon in the diagram will turn red.

20



### 21 Mount the ZOLO device.

Find a suitable location for the ZOLO device. Use two screws to mount the device on the wall. The small bracket can be separated temporarily from ZOLO for easy access during mounting.

2 X →



### 22 ZOLO is now ready to use.

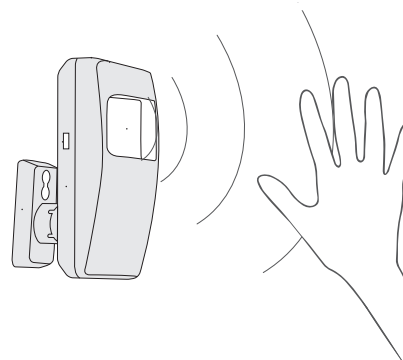
Download the user manual on [www.protectglobal.com/zolo](http://www.protectglobal.com/zolo).

For example you can read how to add and edit up to 10 phone numbers controlling ZOLO.



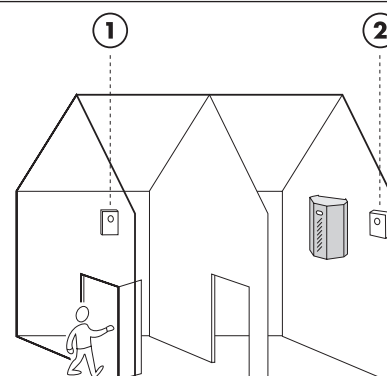
### 23 How to check that ZOLO is working and detecting motion.

When the red LED is switched off move your hand in front of ZOLO. The system will detect the motion and the LED will light up for a few seconds.



## 4.0 Full scale test

You should always make a full scale test with activation of the fog when finished with the installation of ZOLO. The test ensures that ZOLO (1), the verifying sensor (2) and the fog cannon are connected to each other and that the PIR sensors are placed correctly.



## 5.0. Trouble-shooting

Fault	Possible reason
Lens indicator OFF	<ul style="list-style-type: none"> <li>* No mains 230V power</li> <li>* Power supply connector is unplugged</li> <li>* Signal too weak or out of coverage</li> </ul>
Indicator is blinking once a second	<ul style="list-style-type: none"> <li>* SIM Card is missing</li> <li>* PIN code on the SIM Card hasn't been disabled</li> <li>* SIM Card is not active</li> </ul>
System does not send any SMS text message and/or does not ring	<ul style="list-style-type: none"> <li>* SIM Card is missing</li> <li>* Incorrect SIM central number</li> <li>* No network signal</li> <li>* User number is not programmed in (or call was made from an unprogrammed number and access from such numbers has been disabled)</li> </ul>
SMS text message received: "Incorrect Format"	<ul style="list-style-type: none"> <li>* Wrong syntax</li> <li>* Space is in wrong place in the SMS text message</li> <li>* Manufacturer default password has not been changed</li> <li>* The NR1 user has not been programmed in</li> </ul>
Your existing ZOLO does not recognize a wireless device, e.g. a fog cannon	<ul style="list-style-type: none"> <li>* Either: Wireless mode is disabled. Please refer to ZOLO Configuration Tool software to enable it</li> <li>* Or: Wireless device battery is out of energy or the device is not switched ON</li> </ul>
Some users are not getting arm/disarm and/or alarm notifications	<ul style="list-style-type: none"> <li>* If you normally configure your ZOLO by SMS text-messages, you should be aware that there are some user options which can be set when using the ZOLO Configuration Tool but not when using configuration by SMS. Review system settings using the ZOLO ConfigurationTool and you will see a fuller picture of settings for individual users</li> </ul>

*If you cannot find the answer to your problem above, please contact your local dealer/distributor.*

## 6.0. Technical information



### ZOLO GSM Security System device:

**Communication:** SMS, voice calls, GPRS network

**Detection angle:** 90° Dual Detector

**Max. motion detection range:** 10 m

**Wireless communication range:**  
Up to 30 m in premises, up to 150 m in open areas

**Wireless transmitter-receiver frequency:** 868 Mhz

**GSM modem frequency:** 850/900/1800/1900 Mhz

**Supply voltage:** 11-15 V, 500 mA max

**Backup battery voltage, capacity:** 8.4 V, 250 mAh

**Backup battery operating time:** Up to 24 hours

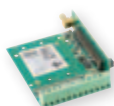
**Operating temperature range:** -10 to +40 °C.

**Maximum number of wireless devices:** 16

**Supported protocols:**  
Ademco Contact ID, EGR100, Kronos, Cortex SMS

SIM Card not included (must support 2G)

Power supply and USB cable included



### ZOLO Communication Card:

Ensures wireless communication between fog cannon and ZOLO

The card is placed inside the fog cannon and connected to the PCB of the unit

The magnetic card makes the installation easy

The antenna is connected to the communication card



### Antenna:

The antenna is connected to the ZOLO Communication Card inside the fog cannon

The antenna is placed on the outside of the fog cannon's metal cover

The antenna is magnetic which makes the installation easy



### PIR sensor:

Verifying sensor for the fog cannon

The sensor is connected with a wire to the PCB of the fog cannon

The sensor is mounted adjacent to the fog cannon. Ensure that the fog cannon does not cover the detection angle of the sensor

**Detection angle:** 90°

**Max. motion detection range:** 10 m



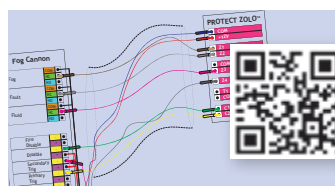
### Remote control unit:

Quick and easy way to arm/disarm the ZOLO GSM Security System

Attractive and elegant design



Scan the QR-code with a smartphone and watch a short installation video about ZOLO GSM Security System.



Scan the QR-code with a smart phone and get installation diagrams of ZOLO GSM Security System.



PROTECT A/S is the world's largest supplier and the only producer of Fog Cannons in Scandinavia.  
PROTECT™ is represented worldwide in 40 countries.